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## **MEMORANDUM**

**TO:** District Superintendents and Charter School Administrators

**FROM:** Alphonse Damas, Ph.D.  
Director of Integrated Data Management  
Research and Evaluation

**DATE:** May 15, 2006

**SUBJECT:** Data Correction Instruction for the Four-Year Graduation Rate Data for  
the Cohort Class of 2005  
(REF #RE06006E)

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Information about the 2005 cohort class membership and the graduation outcome of each student in the class at the end of four years can be verified and adjusted by an authorized person during the data verification window which opened on May 8, 2006 and closes on June 30, 2006.

Upon reviewing your graduation data, you may find:

- Students who had previously dropped out or had a status unknown came back to school to finish their graduation requirements by the last day of the 2004-2005 school year
- Student who were erroneously counted within the 2005 cohort class

As a result, you may need to update the four-year graduation outcomes to reflect what really happened by the fourth year of high school (i.e., school year 2004-2005). The instructions provided below are for schools that would like to adjust their graduation data and submit their changes to the ADE. The following instructions describe how schools can adjust and submit their four-year graduation data for the cohort class 2005. We first, however, describe the methodology used by the ADE to identify the members of the cohort class of 2005 and the formula used to compute the four-year graduation rate.

### **Methodology Used to Identify Members of the Cohort Class of 2005**

As stipulated in Proposition 301, "By July 1, 2001, each school district and charter school must submit electronic data on a school by school basis, including student level data, to

the Arizona Department of Education in order to receive monies for the cost of educating students.” The data collected about a student includes student identification and demographics, district of residence, school membership (enrollment, withdrawal), grade membership, student needs (e.g., disability, limited English proficiency (LEP)), and participation in programs/services (e.g., SPED services). The Student Accountability Information System (SAIS) was entrusted as the core system by which these electronic transactions would transpire.

Using SAIS data only, the Arizona Department of Education (ADE) calculated the four-year graduation rates for the cohort class of 2005. Members of this class entered the ninth grade year for the first time in the fall of 2001 and were tracked from the first day of the 2001-2002 school year to the last day of the spring semester in the 2004-2005 school year. Over the next four years, the ADE tracked enrollment, transfer and graduation activities of students attending public high schools. Four years later, based on Year-End Enrollment data submitted by each school on or before June 30, 2005, the ADE attributed one of the following outcomes to every student who was a member of the cohort class of 2005: *graduated, still enrolled, dropped out, status unknown, or GED recipient*.

High school status was granted to any school that reported student membership in one or more of the following grades (ten, eleven or twelve) and in at least one or more of the following school years (2001-2002, 2002-2003, 2003-2004 or 2004-2005), and offered a high school diploma. These membership criteria are made more explicit in Table 1.

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Insert Table 1 Here

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Schools that met these criteria were considered to have served members of the cohort class of 2005 at some point during the students’ high school years. If all members of the cohort transferred to other educational facilities, for example, it is possible for a school to have a class membership of zero with a corresponding zero graduation rate. Based on the Year-End Enrollment data extracted from SAIS as of March 1, 2006, 457 schools satisfied one or more of the membership criteria stated above.

To validate the graduation data generated for these high schools, the ADE conducted checks and contacted schools and districts to resolve discrepancies and clarify questions about inconsistent numbers. In addition, the ADE established a data verification and correction process which allows district and charter schools to adjust the four-year graduation data that will be used in the 2006 Adequate Yearly Progress (AYP) evaluations.

### **Calculation of the Four-Year Graduation Rate**

The four-year graduation rate is expressed as a percentage of the class membership and reflects the proportion of the cohort class of 2005 that received a high school diploma by their **fourth** year Spring commencement in 2005:

$$\left( \frac{\text{Graduates within four years}}{\text{Cohort membership}} \right) \cdot 100$$

### Instructions for Data Correction

Please follow the procedures outlined below when making corrections and/or additions to the graduation data for your school. There are three steps involved in the data correction process: 1) Viewing your data; 2) Adjusting your data; and 3) Submitting your corrected data.

#### Step 1: Viewing Your Four-Year Graduation Data

The four-year graduation data are reported with a set of codes that accomplishes several goals:

- They identify the students who had membership at your school in grades 9-12 between fiscal year 2002 and 2005.
- They identify the students who were excluded from the final cohort class membership.
- They identify the cohort class members who completed graduation requirements by their fourth year of high school.
- They also identify the cohort class members who did not complete graduation requirements by their fourth year of high school.

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Detailed explanations for these codes are available in the *Graduation Rate Grid Codes Description* sheet (see [GR\\_2006\\_data\\_correction\\_instructions.doc](#)).

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The ADE will provide the graduation data in two formats, text and Excel. Table 2a gives a description of the graduation data provided by the ADE to fictitious high school Tiny High for cohort class 2005. The file consists of 20 data fields but only 11 are listed for the purposes of this example. Columns **C<sub>2</sub>** to **C<sub>5</sub>** are self-explanatory. The column labeled SPED (**C<sub>6</sub>**) indicates whether or not the student is in a Special Education program ( 0 = No and 1 = Yes). The next four columns labeled FY02 to FY04 (**C<sub>7</sub>**-**C<sub>10</sub>**) indicate the membership status of a student in a given year. For example:

- The final membership status of student #1 at the end of school year 2001-2002 and 2002-2003 was not at this school. As a result, this student was coded as “N = No” under the fields FY02 and FY03 and was not counted as part of this high school’s class membership in fiscal years 2002 and 2003.
- The final membership status of student #1 at the end of school year 2003-2004 was at Tiny High. As a result, this student was coded as “Y = Yes” under the field FY04 and counted as part of Tiny High’s class membership for fiscal year 2004.

- The final membership status of student #1 at the end of school year 2004-2005 was not at this school. As a result, this student was coded as “N” under the field FY05.
- The final column in Table 2a, Final\_status (C<sub>11</sub>), indicates the final class membership and/or graduation status of a student. It is important to note that although student #1 had no membership at Tiny High in fiscal year 2005, this student **will count** towards this school’s cohort 2005 class membership. This membership was based on two reasons:
  1. Student #1 neither transferred to another educational facility nor recorded membership at another Arizona public school during fiscal year 2005 according to SAIS; and
  2. Student #1 last recorded membership according to SAIS was at Tiny High in fiscal year 2004.
- Finally, student #1 has a code of “NG”. This means that this student will not only count towards Tiny High’s final cohort 2005 class membership but will also count against its four-year graduation rate because this student did not graduate within four years.

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Insert Table 2a Here

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Alternative results can be seen for students #2 to #5. Even though students #2 and #3 appear to have identical profiles to that of student #1, Students #2 and #3 are not counted towards Tiny High’s final cohort 2005 class membership. This is because the ADE was able to determine through SAIS that these students either enrolled at another Arizona public school or transferred to another school outside of Arizona. Thus under the field Final\_status, we coded students #2 and #3 with a “Z = Excluded from final cohort 2005 class membership.”

Student #4 was included in Tiny High’s class membership because her last membership in fiscal year 2005 was at this school. In addition, because student #4 graduated at this school within four years she was coded as “G = Graduated.”

Finally, student #5, although she did not have membership in Tiny High in fiscal years 2004 and 2005, she nevertheless counts towards this school’s cohort 2005 class membership because her last recorded membership based on SAIS was at this school in fiscal year 2003. In addition, because she did not graduate within four years, this student will count against Tiny High’s four-year graduation rate.

In summary, Tiny High is only responsible for three of the five students (i.e., students #1, #4 and #5) who had reported membership in at least grade 9, 10, 11, or 12 between fiscal years 2002 and 2005. Of these students, only one graduated (i.e., student #4). Calculating Tiny High’s four-year graduation rate:

$$\text{Graduation Rate} = \left( \frac{\text{Graduates within four years}}{\text{Cohort membership}} \right) * 100 = \left( \frac{1}{3} \right) * 100 = 33\%$$

## Step 2: Adjusting the Four-Year Graduation Rate Data

Once you have reviewed your four-year graduation rate outcomes for cohort class 2005, there may be times when you need to change the results. You can make changes until the deadline, June 30, 2006, for the cohort class established by the Research and Evaluation Section.

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If you need to make changes to a data component after the deadline, you must contact the Research and Evaluation Section at (602) 542-5151.

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The ADE will only accept verified graduation rate information about each school either in an Excel or a text file with the exact data structure as the one provided by the ADE. Below are just a few recommended practices:

- 1. Make sure to preserve the original file format.**
- 2. You can add new records to reflect students who were omitted.**
- 3. DO NOT add or delete columns in the data file.**

The instructions below assume you are using an Excel spreadsheet. These instructions are transferable to a text document. For schools that decide to submit changes using a text file, please make the corrections to your data file and save it as a pipe-delimited “|” text file on your computer.

To change any data element in the four-year graduation file, please do the following:

1. For the row you are about to correct, change the value of the Status field (C<sub>1</sub>) to “1”. A value of 1 alerts our program during upload that one or more data values in this row has been adjusted.
2. Then click inside a cell under any appropriate field with a value you want to enter
3. Type the new valid value
4. Repeat Step 2 and Step 3 for each cell you want to change.
5. Save the file after all code changes have been entered.

To enter new membership in the four-year graduation rate file, please do the following:

1. On the tool bar of the Excel application, click Insert, then click Rows
2. After the row has been inserted, enter a value of “1” in the Status field. A value of 1 alerts our program during upload that this is a new membership.
3. Click inside the cell where you want to start entering data
4. Make sure you enter a valid value in each cell.
5. Save the file after all code changes have been entered.

Table 2b provides a sample corrected data file submitted to the ADE based on graduation data contained in Table 2a. Notice that all the rows that have been adjusted can be more easily identified because of their Status code.

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Insert Table 2b Here

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### **Step 3: Submitting Your Corrected Data**

Send all corrected files as an attachment to [gradrate@ade.az.gov](mailto:gradrate@ade.az.gov) with the Subject Header: Cohort 2005 Graduation Rate Corrected Data. Once accepted, the ADE will produce a new graduation rate for these schools based on the corrected information.

If you have any questions about these instructions or the data correction process, please send an e-mail to [gradrate@ade.az.gov](mailto:gradrate@ade.az.gov) or call 602-542-5151. Be sure to include the following with each correspondence to the ADE: school/district name, school/district CTDS and Entity ID, your name, email address, and phone number.

Thank you for your cooperation.

Sincerely,

Alphonse Damas, Ph.D.  
Director of Integrated Data Management

Table 1: Class Membership Criteria by Fiscal Year for the Cohort Class of 2005

	Fiscal Year			
	2002	2003	2004	2005
Membership Criteria	<ul style="list-style-type: none"> <li>Students entering the 9<sup>th</sup> grade for the first time (A)*</li> <li>Minus any of the above students who transferred out or are deceased (B)</li> </ul>	<ul style="list-style-type: none"> <li>Students entering the 10<sup>th</sup> grade for the first time with no FY02 SAIS data (A)*; or</li> <li>Students who were enrolled in the 9<sup>th</sup> grade in FY02 and are enrolled in the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (B)</li> <li>Minus any of the above students who transferred out or are deceased (C)</li> </ul>	<ul style="list-style-type: none"> <li>Students entering the 11<sup>th</sup> grade for the first time with no FY02 and FY03 SAIS data (A)*; or</li> <li>Students who were enrolled in the 10<sup>th</sup> grade in FY03 and are enrolled in the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (B); or</li> <li>Students who were enrolled in the 9<sup>th</sup> grade in FY02 and are enrolled in the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (C)</li> <li>Minus any of the above students who transferred out or are deceased (D)</li> </ul>	<ul style="list-style-type: none"> <li>Students entering the 12<sup>th</sup> grade for the first time with no FY02, FY03 and FY04 SAIS data (A)*; or</li> <li>Students who were enrolled in the 11<sup>th</sup> grade in FY04 and are enrolled in the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (B); or</li> <li>Students who were enrolled in the 10<sup>th</sup> grade in FY03 and are enrolled in the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (C); or</li> <li>Students who were enrolled in the 9<sup>th</sup> grade in FY02 and are enrolled in the 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (D)</li> <li>Minus any of the above students who transferred out or are deceased (D)</li> </ul>
Class Membership =	A - B	A + B - C	A + B + C - D	A + B + C + D - E
* With no prior SAIS data these students are assumed to be entering this grade for the first time.				

Table 2a: Sample Four-Year Graduation Data for Cohort Class of 2005 for Tiny High

Status C <sub>1</sub>	SAISID C <sub>2</sub>	Lname C <sub>3</sub>	Fname C <sub>4</sub>	EntityName C <sub>5</sub>	SPED C <sub>6</sub>	FY02 C <sub>7</sub>	FY03 C <sub>8</sub>	FY04 C <sub>9</sub>	FY05 C <sub>10</sub>	Final_status C <sub>11</sub>
0	1	Monroe	Jim	Tiny High	1	N	N	Y	N	NG
0	2	Wade	Bruce	Tiny High	0	N	N	Y	N	Z
0	3	Van Dyke	Will	Tiny High	0	N	Y	N	N	Z
0	4	Blake	Tyra	Tiny High	1	N	N	N	Y	G
0	5	Bryant	Liz	Tiny High	1	N	Y	N	N	NG

$$\text{Graduation Rate} = \left( \frac{\text{Graduates within four years}}{\text{Cohort membership}} \right) * 100 = \left( \frac{1}{3} \right) * 100 = 33\%$$

Table 2b: Corrected Sample Four-Year Graduation Data for Cohort Class of 2005 for Tiny High

Status C <sub>1</sub>	SAISID C <sub>2</sub>	Lname C <sub>3</sub>	Fname C <sub>4</sub>	EntityName C <sub>5</sub>	SPED C <sub>6</sub>	FY02 C <sub>7</sub>	FY03 C <sub>8</sub>	FY04 C <sub>9</sub>	FY05 C <sub>10</sub>	Final_status C <sub>11</sub>
1	1	Monroe	Jim	Tiny High	1	N	N	Y	N	Z
0	2	Wade	Bruce	Tiny High	0	N	N	Y	N	Z
0	3	Van Dyke	Will	Tiny High	0	N	Y	N	N	Z
0	4	Blake	Tyra	Tiny High	1	N	N	N	Y	G
0	5	Bryant	Liz	Tiny High	1	N	Y	N	N	NG
1	6	Holland	Sarah	Tiny High	1	N	Y	N	N	G
1	6	Westbrook	Tim	Tiny High	0	N	Y	N	N	G

$$\text{Graduation Rate} = \left( \frac{\text{Graduates within four years}}{\text{Cohort membership}} \right) * 100 = \left( \frac{3}{4} \right) * 100 = 75\%$$